

Application No. 09/663,928

REMARKS

Examiner Huson is again thanked for her careful consideration of the present patent application and for conducting a teleconference with the undersigned on January 19, 2006.

The sole remaining rejection is a § 103 rejection of the claims over Altieri in view of Protzman. As stated at the teleconference, it is respectfully submitted that the Examiner has misconstrued the teachings of the Altieri and Protzman references.

As an initial matter, the new claims, which specify a hydroxypropyl starch, are fully supported by the specification (see, e.g., Example 1). The amendments to the independent claims find support, for instance, at page 4, line 21 and also at Example 1.

The claims no longer recite "having a conventional particle size distribution." However, the claims have been amended to specify that at least 90% of the starch by weight passes through a 180 micron screen (see Example 1). With respect to Rose reference previously cited in the last Office Action, the claims continue to distinguish over Rose; see, e.g., Rose at column 2, lines 47 – 55 ("It has been found that the feed starch particle size is an important factor. A significantly large and defined particle size has been found especially advantageous The useful particle size is large and in a defined range of from about 400 to 1500 microns.").

Applicants note that the present claim limitations further distinguish over the Altieri reference. As disclosed by Altieri, it is deemed necessary to use starch "chunks" which are of a significantly larger particle size. See column 2, lines 23 – 40 and Examples 1 and 2. In Example 1, it is revealed that the starch "chunks" are sized such that over 70% are retained on an 80 mesh screen (80 mesh corresponds to 180 microns). See column 6, line 5. In Example 2, a comparative example, a starch having a smaller size was employed, and in Example 3, this starch is reported as being unsatisfactory (the extrusion is indicated as being "unstable.") Accordingly, Altieri teaches away from the particle size employed in the present invention.

Moreover, even if one were to overlook this defect in the § 103 rejection, the § 103 rejection still would be improper. The claims are drawn to a hydroxyalkyl starch and, in some embodiments, a hydroxypropyl starch. Protzman does not disclose a soluble, hydroxyalkyl starch. The only starches that are reported as having a "cold water solubility" according to Protzman of greater than 90% are Examples 13 and 19. Neither is a hydroxylalkyl starch, and indeed, at least Example 15 is prepared using dimethylsulfoxide, a known starch solubilizing

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agent. Protzman does disclose a hydroxyalkyl starch at Example 15, by the solubility reported (at Table 2, col. 11) is only 26%. It is noted further that Example 15, also was practiced using dimethylsulfoxide; thus, even with this solubilizing agent, the solubility reported by Protzman still falls well outside the presently claimed range.

As previously indicated to the Examiner in a prior Office Action response, Altieri is silent as to solubility. The actual solubility of any starch disclosed by Altieri is not stated (but the starch is probably insoluble); in any event, Altieri does not disclose anything as to solubility. The combined teachings of Altieri and Protzman likewise do not lead one of ordinary skill in the art to the conclusion that a hydroxypropyl starch may be made soluble. Protzman discloses starches of low solubility, and there is nothing in the teachings of Altieri to suggest that solubility would increase if the starch of Protzman were employed.

For the foregoing reasons, the § 103 rejection cannot be maintained. Applicants respectfully solicit a prompt Notice of Allowance.

Respectfully submitted,

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